



# PON APPLICATIONS

# PON | OUR PON OFFERING



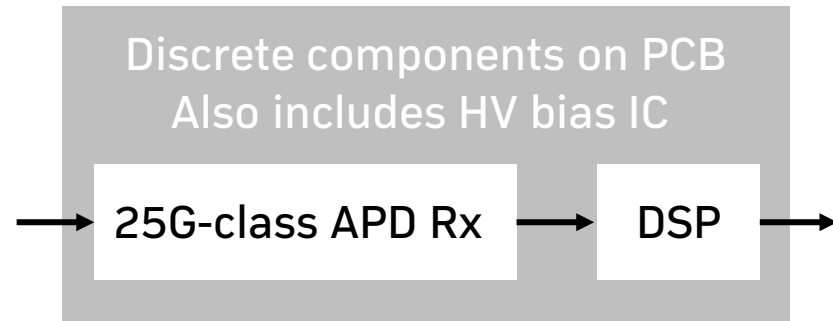
Bringing your innovation to life

| SMARTs PON today                         | SMARTs PON tomorrow                                                       |
|------------------------------------------|---------------------------------------------------------------------------|
| 10G                                      | 50G                                                                       |
| Beyond Residential,<br>Diverse Scenarios | Unified access,<br>reuse of ODN for enterprise,<br>5G/6G mobile fronthaul |

# PON | OUR 50G PON OFFERING

## CURRENT SOLUTION

APD with DSP



*This introduces complexity, sets upper boundaries in performance, increases the cost of assembly as well as the power consumption & OpEx*

## SMART Photonics' SOLUTION

SOA + Filter + HS PD for 50G Rx



- ✓ Better performance
- ✓ Lower size & cost
- ✓ Lower power consumption
- ✓ Future-proof strategy



# PON | WE COLLABORATE WITH ALL MAJOR PLAYERS

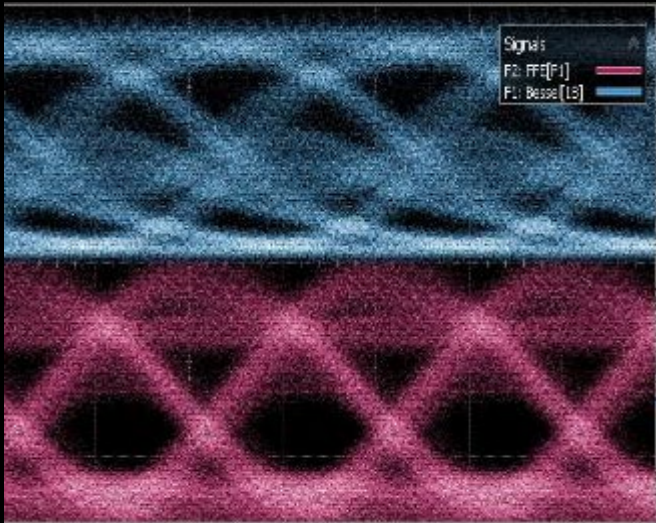


We collaborate with all major players in the industry to test all optical chip prototypes (TxRx) on SDN-based 50G PON relevant environments

# PON | Tx (DBR-EAM) DYNAMIC CHARACTERIZATION

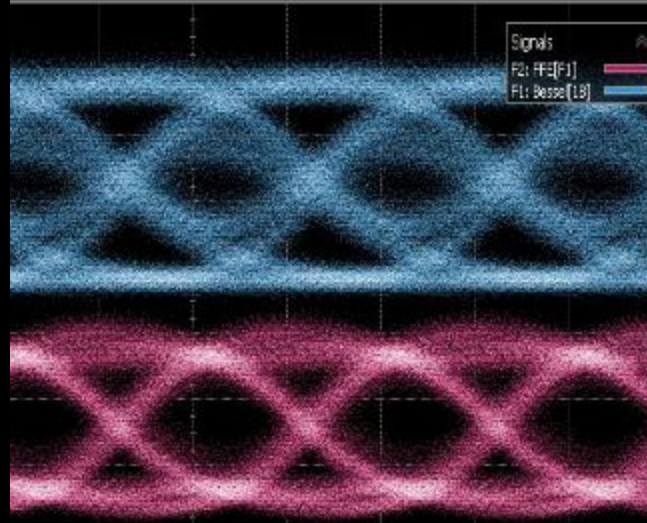
$\lambda = 1351.2 \text{ nm}$  @  $T = 21.9^\circ\text{C}$

30 Gb/s



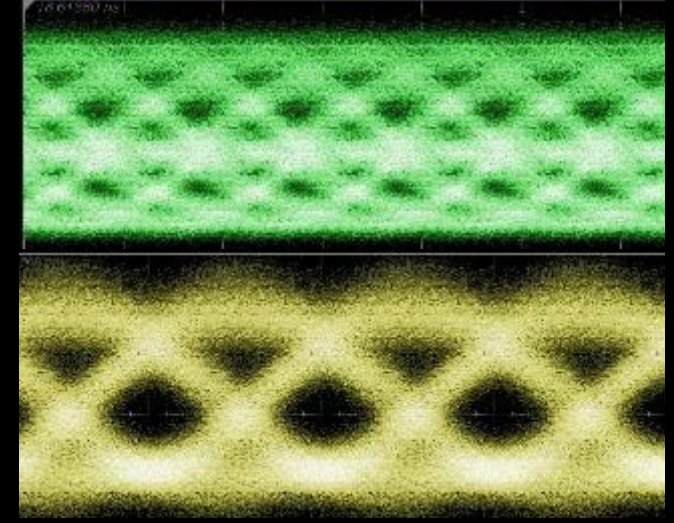
ER: 2.9 dB - Q(SNR): 5.8

40 Gb/s



ER: 4.3 dB - Q(SNR) : 4.5

50 Gb/s



Q(SNR) : 3.6